

1. (Amended) A method to provide a high pressure press comprising a cylindrical pressure chamber and a replaceable wear liner, comprising the steps of:

- inserting the wear liner into the cylindrical pressure chamber; and
- fixing the wear liner in place with expansion by inner pressure above the yield point, such that the wear liner is thereby arranged in a state of residual compressive stress by the increase in diameter of the wear liner.

2. (Amended) A method according to claim 1, further comprising:
closing the press and applying an inner fluid pressure to the wear liner inside the press, so as to provide the residual compressive stress.

3. (Amended) A method according to claim 2, wherein the inner fluid pressure is supplied by an external pressure source connected to the press.

4. (Amended) A method according to claim 1, wherein the wear liner is plastically deformed, so as to provide the residual compressive stress.

5. (Amended) A method according to any one of claims 1-4, wherein the method further comprises replacing the wear liner, which includes the steps of:

- making at least one cut in the inner surface of the wear liner; thereby causing the wear liner to collapse under the residual compressive stress; and
- removing the collapsed wear liner.

6. (Amended) A method according to claim 5, wherein the cut is approximately square in cross section.

7. (Amended) A high pressure press comprising a cylindrical pressure chamber and a replaceable wear liner arranged inside the cylindrical pressure chamber in a state of residual compressive stress, wherein the exterior surface of the wear liner is in direct contact with the interior surface of the cylindrical pressure chamber.

8. (Amended) A high pressure press according to claim 7, wherein the wear liner is shaped as a thin walled, circular cylinder.

9. (Amended) A high pressure press according to any one of claims 7-8, wherein the wear liner is plastically deformed as a result of an expansion of the wear liner after its insertion into the pressure chamber, so that a residual compressive stress is provided.

10. (Amended) The use of a high pressure press according to claim 7 for the treatment of substances.

11. (Amended) The use of a high pressure press according to claim 7 for the isostatic pressing of powder pre-form products.


12. (Amended) The use of a high pressure press according to claim 7 for the isostatic pressing of castings.

Please add new claims 13-16 to read as follows.

13. (New) A method of replacing a wear liner, the wear liner being in a state of residual compressive stress and contained within a cylindrical pressure chamber, comprising the following steps:

making at least one cut on an inner surface of the wear liner to a predetermined depth that is less than the thickness of the wear liner;
allowing walls of the wear liner to collapse; and
removing the collapsed wear liner.

14. (New) The method of replacing a wear liner according to claim 13 wherein the wear liner is contained in a liner holder located within the cylindrical pressure chamber.




15. (New) The method of replacing a wear liner according to claim 13 wherein the cut made in the wear liner is approximately square in cross section.

16. (New) The method of replacing a wear liner according to claim 13 wherein four longitudinal cuts are made around the inner circumference of the wear liner.

In the Abstract:

The Abstract has been amended to read as follows:



A method to provide a high pressure press with a replaceable wear liner. The wear liner is first inserted into the cylindrical pressure chamber of the press and the pre-stressed by the application of an excess pressure above the yield point. The excess pressure is sufficient to increase the diameter of the wear liner and produce a residual radial compressive stress that holds the wear liner in place. When the wear liner is removed from the press it is dismantled. The advantage of the invention is that the replaceable wear liner, and a high pressure press comprising it, may be relatively inexpensive to produce and the replaceable wear liner may be quickly and simply replaced.

REMARKS

Applicant has made minor revisions to the specification for clarity and grammatical purposes. Additionally, Applicant has amended claims 1-12 and added new claims 13-16.